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# Banks as buyers of last resort for government bonds?

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## Summary

A key remaining issue for the completion of the Banking Union is the concentrated exposure of banks in many countries to their own sovereign. This paper examines that the belief that banks should be allowed to buy large amounts of their own sovereign so that they can stabilise the market in a crisis and argues that it is mistaken for two reasons. In the first instance, banks are only intermediaries for private savings, and secondly, banks have a higher cost of funding than do their sovereign. The overall conclusion is that governments should make it more attractive for households (and other real money investors) to hold government debt directly.

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## Introduction

One of the key remaining key issues for the completion of the Banking Union is the concentrated exposure of banks in many countries to their own sovereign. A number of contributions have argued that banks should be discouraged from holding too much government debt and in particular should be discouraged from holding too much debt of their own government (Andritzky et al., 2016, ASC, 2015 and Korte & Steffan, 2014).

The key counter-argument is that banks should be allowed to buy large amounts of their own sovereign because in this way they can stabilise the market in a crisis.

Visco (2015) argues:

... tight concentration limits could create substantive difficulties in “crisis” times. They could be particularly disruptive for banks’ ability to act as shock absorbers in the event of sovereign stress....

This argument is mistaken, however. As explained below, there are two reasons why the act of a bank buying the bonds of its own national government does not have a large positive impact on bond prices.

## Banks are only intermediaries

First of all, purchases of sovereign debt by banks should not be regarded as an additional demand for public debt. Banks are simply intermediaries for private savings.

The idea that banks can somehow increase the demand for sovereign debt arises from the presumption that banks collect savings in the form of deposits, which would not be available to fund a public sector deficit if banks did not buy government bonds. But in reality most banks, especially the larger ones, finance a substantial part of their balance sheet via the capital market.

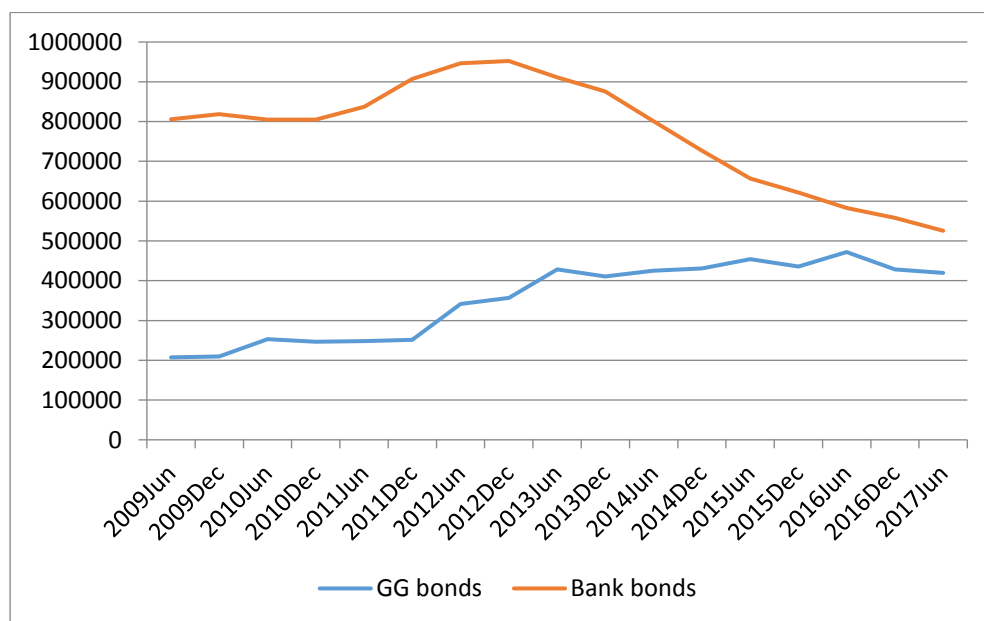
For example, Italian banks today have over €500 billion in bonds and other debt instruments outstanding. This is about 30% of the amount of (non-bank) deposits of over €1,500 billion, and more than the €450 billion in government bonds. The net demand for Italian government bonds would not need to fall if the same savers who now hold bank bonds in their portfolios (mostly households with securities deposits ‘administered’ by the banks) were to hold government bonds instead.

During the period of acute financial stress (2011-12), the importance of bank bonds was even larger. During that period, Italian banks had over €900 billion in bank bonds outstanding, more than one-half of their deposits. In Spain, the other large country under financial stress, bank bonds also played an important part on the liability side of the balance sheet of the bank system.

Moreover, as Figure 1 below shows, initially Italian banks issued more bank bonds as they were buying government bonds. Banks clearly did not use excess deposits to support the Italian government debt market, but instead relied on bond financing to do so. The ultimate investors could just have held government instead of bank bonds.

It follows that one cannot argue that the imposition of concentration limits would throw the government debt markets of highly indebted countries like Italy or Spain into turmoil. If the banks in these countries were forced to diversify their sovereign debt holdings, this might simply result in a reduction of bank bonds and more direct holdings of government debt by households.

Figure 1. General government (GG) bonds held and bank bonds issued in the Italian banking system, 2009-17 (€m)



Data source: ECB.

When banks issue bonds to buy government paper, economy-wide leverage increases. Moreover, the disadvantage of banks, as opposed to real money investors, holding a substantial proportion of public debt is that they are themselves leveraged. This means that any loss of value of sovereign debt puts their solvency rapidly in doubt and increases overall financial stress, contributing to the famous diabolic loop. It follows that forcing banks to hold less government debt would reduce economy-wide leverage and should thus be stabilising.

### Banks have a higher cost of funding

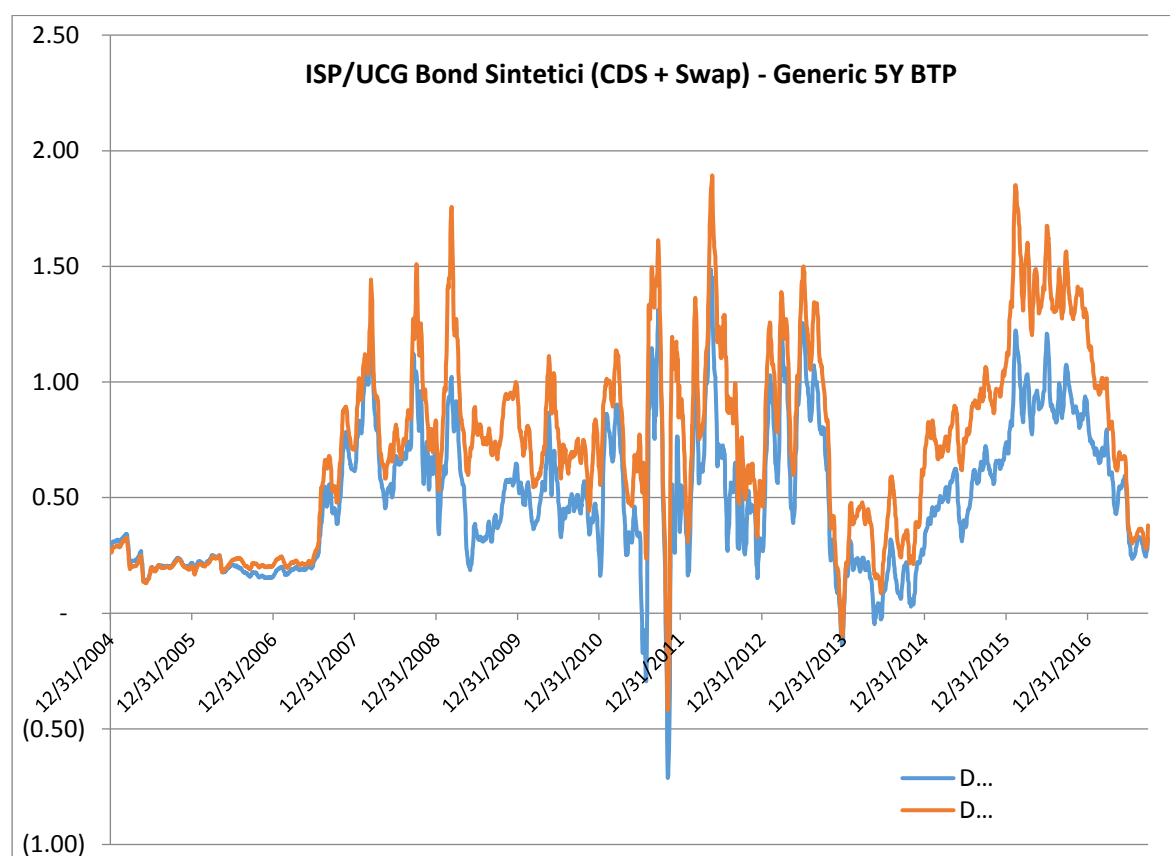
A second reason why banks should not become 'shock absorbers' for the government debt market is that the (marginal) funding cost for banks is usually higher than that of the sovereign (at least for market instruments, like bank bonds). Ratings agencies usually have a rating limit for corporates headquartered in a country, which is given by the sovereign rating. Another reason is that ratings agencies (and investors in general) expect the home government to stand behind its banks when they experience difficulties (the recent experience with the Venetian banks shows that this remains the case even under the new 'bail-in' regime).

It is not straightforward to establish how much more banks have to pay on their (senior) bank bonds than the government because bank bonds are issued less frequently and have a shorter

maturity than the standard (government) bond indices. Coletta & Santioni (2016) use a survey of prospectuses to conclude that after 2013 the yields promised by bank bonds were up to 2-3 points higher than those on government bonds of equivalent duration.

However, if one wants to measure the real cost of bank bonds, one needs to use market prices. In the absence of country-specific indices for senior bank bonds, Figure 2 below therefore shows the difference between the synthetic yields<sup>1</sup> (calculated from CDS and Swap rates) on Italy's two biggest banks<sup>2</sup> and that of Italian government paper of similar duration (BTP 5 years). It is apparent that the banks were almost always paying more on their own securities than the government. Moreover, during crisis times the difference in yields typically increases, reaching at times, even 100 basis points. The average for the period considered here is around 50 basis points. This implies that holding government bonds financed with bank paper yields substantial losses over the long run. For the smaller banks, which typically have a lower rating, the difference in yields must be even larger.

Figure 2. Yield differential senior bonds of major Italian banks and Italian government debt



Source: Eurizon Capital SGR.

<sup>1</sup> Comparing a concrete longer-term bond outstanding over the entire period yields a somewhat different picture: the average difference to government debt (of the same maturity) is somewhat lower, but the difference is larger during the crisis period of 2011-12.

<sup>2</sup> Intesa San Paolo (denoted ISP) and Unicredit (UCG). These two banks account for about 40% of the Italian market.

The fact that in reality banks have indeed in general a higher funding cost than their own government means that the interest margin on government bonds must be negative. More bond buying will thus weaken the banks, which they can ill afford in a context in which they are already burdened by large non-performing loans.

One can of course argue that in the presence of denomination risk, banks might have an incentive to hold domestic bonds in order to minimise the potential ‘currency mismatch’. This argument might explain why banks have an incentive to concentrate their holdings of government bonds on domestic paper; but even in the presence of denomination risk, it does not make sense to buy more domestic government bonds when these purchases have to be financed with higher cost bank bonds. Moreover, the difference in yields tends to increase when denomination risk increases. Large bond buying during crisis times thus risks to aggravate financial market stress crisis instead of mitigating it.

Banks are of course always tempted to finance themselves cheaply in the short term and then make long-term investments (this is called “maturity mismatch”). For the normal banking business of collecting short-term deposits to fund medium-term loans to enterprises (or longer-term mortgages), this maturity mismatch is unavoidable. But there is no structural need for banks to issue short-term paper to fund investments in longer-term government bonds. This business model is fit more for a hedge fund than a bank. Moreover, the yield curve has been so flat for so long now that differences in maturity cannot easily overcome the funding cost handicap of banks vis-à-vis their own sovereign.

Finally, one has to distinguish between *ex ante* and *ex post*. When a bank has a large exposure to its home sovereign, it will be affected strongly when a new crisis starts, as the value of the bonds on its balance sheet will fall. The regulatory capital position might not be affected since government debt can be held to maturity so that its market value does not enter into the calculations for the regulatory capital requirements. But market participants can make their own calculations and will in general mark down the value of the bank’s equity on the basis of mark to market losses. It follows that the country would be less affected by financial stress if at the start of a crisis its banks held little domestic public debt. It would thus be desirable to reduce the existing large exposures to domestic public debt, even if one follows the argument that banks can become the buyers of last resort for public debt in a crisis. The less banks hold at the beginning of the crisis, the more they would be able to buy. The potential instability is of course even greater if banks during tranquil times use short-term instruments to fund investments in long-term government bonds. An increase in the risk premium would then add liquidity problems to the mark to market losses.

### What should be done?

Banks have to hold a substantial amount of government bonds anyway under the so-called ‘liquidity coverage ratio’ or LCR, which forces banks to have enough liquid assets to cover the cash needs that could rise under certain standardised scenarios of a withdrawal of deposits and other events requiring cash in hand. Banks can satisfy the LCR in principle using any asset, which

can be quickly converted into cash. But the regulations make government bonds de facto the main asset to be used for the LCR.

The question is thus not whether banks should hold any government bonds at all, but rather whether encouraging banks to hold large amounts of home government bonds is a good idea. Encouraging banks to hold home government bonds in excess of the minimum required by the LCR could actually weaken both banks and government finances. Moreover, even those holdings necessary under the LCR should be diversified to avoid linking the fate of the banks too much to that of their own sovereign. Governments should stop looking to their banks as a source of financing large public debts and start selling their bonds directly to the ultimate investors, namely domestic households.

As so often, it is the dog that does not bark, which contains a key clue. It has been widely observed that banks in ‘non-stressed’ countries exhibited a much lower home bias than those in stressed countries. The literature has focused on the stressed countries (ASC, 2015, Acharya & Steffan, 2013 and Affinito et al., 2016). But the more interesting question is why banks in countries with low interest rates forego higher interest revenues by not holding more high-yielding government bonds from the periphery when all these bonds are considered officially riskless?

In the past one might have ascribed this apparent lack of profit maximisation to ‘moral suasion’ from their home supervisors who pressured them to buy domestic government bonds (Altavilla et al. 2017, Horvath, 2015). But all large banks have now been under the direct supervision of

In the past one might have ascribed this apparent lack of profit maximisation to ‘moral suasion’ from their home supervisors who pressured them to buy domestic government bonds (Altavilla et al., 2017 and Horvath, 2015). But all large banks have now been under the direct supervision of the ECB (or rather the Single Supervisory Mechanism or SSM) for a couple of years. Home supervisors should thus be much less able to exert moral suasion. The real reason why there has been no rush by banks in other countries to buy peripheral government bonds is that investors would take notice that more risk has been taken and that the funding cost of the banks would increase correspondingly. The same effect should also operate for peripheral banks: their funding costs should fall if they reduce their excessive concentration on domestic government debt. Diversifying away from high-yielding domestic government bonds might thus not dent profit as much as widely feared today.

The overall conclusion is that governments should make it more attractive for households (and other real money investors) to hold government debt directly. Getting banks out of the business of financing the government would reduce overall leverage in the economy, and would help to reduce the size of the European banking sector, which is widely regarded as excessive (ASC, 2014). The example of the US, where banks do not hold significant amounts of public debt, shows that there is no need to rely on banks to support the sovereign debt market.

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